



431 River Road
Bow, NH 03304

January 14, 2021

Submitted on-line via NetDMR

U.S. Environmental Protection Agency
Region 1
Water Compliance Section (Mail Code 04-SMR)
5 Post Office Square - Suite 100
Boston, MA 02109-3912

Reference: NPDES Permit No. NH0001465, Merrimack Station, GSP Merrimack LLC,
issued May 22, 2020.

Dear Sir/Madam:

Merrimack Station
Monthly NPDES Discharge Monitoring Report
December 2020

In compliance with Part I, Section B.1., of the NPDES permit (see Reference), Granite Shore Power LLC (GSP) herein submits the NPDES report for Merrimack Station for the month of December. With two exceptions, all sampling and analyses were conducted by station personnel in accordance with EPA approved procedures referenced at 40 CFR Part 136. Personnel from Eastern Analytical, Inc. of Concord, NH, collected the samples and performed the analyses for 1) total suspended solids, total copper, and oil and grease at Outfall 003A, and 2) dissolved oxygen at Outfall 003. There were no permit noncompliances recorded during the month.

As instructed by the agencies, GSP now reports a concentration of zero ("0") when the analytical result is less than the method detection limit (MDL). For this report, the following MDLs were used: Oil & Grease = 5.0 mg/l (EPA 1664B); Total Suspended Solids = 5.0 mg/l (SM 2540D-11). This quarter, a Whole Effluent Toxicity Test was performed at Outfall 003 for the first time. New England Bioassay Inc. of Manchester, CT, reported an LC50 of greater than 100-percent for both species. NetDMR also includes two lines to report 7-day chronic test results which GSP believes are not required by the permit. We have requested clarification of these line items in an email to Region 1 (R1.NetDMR@epa.gov) but have not received an answer to date. Instead, the result of 100% for "A-NOEC" tests are reported on the two DMR lines. The complete report is submitted as an attachment to Discharge DMR 003-T. There was no discharge of metal cleaning wastes during the quarter.

The pH at Outfall 003 (Station S-0) fell below 6.5 SU during several days in December. With both units shut down for most of the month, the lack of cooling water flow from the station may have aggravated in-situ monitoring by creating somewhat stagnant conditions at the outfall. Compliance was maintained with the permit however, as the effluent pH tracked the naturally occurring river pH at Station N-5 (see the attached data sheets), and discrepancies were within the analytical limits of the equipment accuracy and precision. As such, these pH values were not the result of activities at Merrimack Station and should not be recorded as violations in the Integrated Compliance Information System, Enforcement and Compliance History Online, or any other EPA compliance database.

This report is required by, and prepared specifically for, the U.S. Environmental Protection Agency (EPA). It presents truly, accurately and completely, the observed measurements and analyses required by the EPA to be performed or submitted, but only such observed results. It is not intended as an assertion of the accuracy of any instrument, reading, or analytical result, nor is it an endorsement of the suitability of any analytical or measurement procedure.

If you have any questions regarding this report, please call Allan Palmer, Senior Engineer, at (603) 230-7951.

Sincerely,

GRANITE SHORE POWER

A handwritten signature in black ink, reading "Elizabeth H. Tillotson". The signature is written in a cursive style with a horizontal line underneath the name.

Elizabeth H. Tillotson
Executive Director of Administration & Regulatory Affairs

Enclosures

GSP MERRIMACK LLC
MERRIMACK GENERATING STATION
ENVIRONMENTAL MONITORING PROGRAM

MONTHLY SUMMARY REPORT FOR December 2020

STATION: N5

PARAMETER: PH

DAY	MAXIMUM (PARAM)	TIME	DAILY AVERAGE	MINIMUM (PARAM)	TIME	#of INT.
12/01/20	6.67	0045	6.62	6.49	1845	96
12/02/20	6.62	0230	6.54	6.39	2400	96
12/03/20	6.39	0015	6.35	6.33	1930	96
12/04/20	6.39	1730	6.37	6.34	0100	96
12/05/20	6.52	2115	6.43	6.36	0015	96
12/06/20	6.52	0130	6.50	6.47	0230	96
12/07/20	6.63	1400	6.60	6.48	0045	96
12/08/20	6.62	1000	6.53	6.34	1830	96
12/09/20	6.57	1600	6.55	6.50	0015	96
12/10/20	6.53	0315	6.50	6.47	1930	96
12/11/20	6.49	1645	6.48	6.46	1100	96
12/12/20	6.56	2000	6.49	6.45	1200	96
12/13/20	6.56	0045	6.53	6.51	2400	96
12/14/20	6.53	2400	6.51	6.49	0545	96
12/15/20	6.59	2315	6.54	6.51	0830	96
12/16/20	6.59	0630	6.57	6.55	1545	96
12/17/20	6.59	0745	6.58	6.56	0130	96
12/18/20	6.58	0015	6.56	6.54	1445	96
12/19/20	6.55	0015	6.54	6.54	0900	96
12/20/20	6.83	2145	6.68	6.55	0100	96
12/21/20	6.87	2215	6.84	6.82	1030	96
12/22/20	6.87	0015	6.84	6.81	2315	96
12/23/20	6.83	0230	6.77	6.68	1030	94
12/24/20	6.82	2400	6.75	6.72	1430	96
12/25/20	6.94	0545	6.88	6.81	2300	96
12/26/20	6.84	0015	6.75	6.66	2400	96
12/27/20	6.66	0015	6.52	6.44	2045	96
12/28/20	6.47	0730	6.44	6.40	2345	96
12/29/20	6.48	0845	6.44	6.40	0215	96
12/30/20	6.53	2400	6.49	6.45	0030	96
12/31/20	6.67	1015	6.60	6.53	0015	96
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AVERAGE	6.62		6.57	6.52		
STD DEV.:	0.15		0.14	0.14		

GSP MERRIMACK LLC
MERRIMACK GENERATING STATION
ENVIRONMENTAL MONITORING PROGRAM
MONTHLY SUMMARY REPORT FOR December 2020

STATION: Zero

PARAMETER: PH

DAY	MAXIMUM (PARAM)	TIME	DAILY AVERAGE	MINIMUM (PARAM)	TIME	#of INT.
12/01/20	6.68	0330	6.65	6.61	1215	96
12/02/20	6.67	0100	6.54	6.34	2245	96
12/03/20	6.49	2400	6.38	6.29	1045	96
12/04/20	6.54	0845	6.45	6.34	0930	96
12/05/20	6.62	1945	6.55	6.49	0130	96
12/06/20	6.64	0630	6.58	6.55	0345	96
12/07/20	6.78	0500	6.67	6.57	0030	96
12/08/20	6.57	0100	6.45	6.36	0845	95
12/09/20	6.57	2130	6.49	6.42	0430	96
12/10/20	6.55	0815	6.53	6.49	0400	96
12/11/20	6.56	0045	6.54	6.52	1415	96
12/12/20	6.55	0845	6.54	6.53	1100	96
12/13/20	6.55	0245	6.54	6.51	1245	96
12/14/20	6.58	2315	6.55	6.54	0445	96
12/15/20	6.63	1300	6.48	6.20	1945	96
12/16/20	6.57	0330	6.47	6.40	2145	96
12/17/20	6.47	1100	6.44	6.41	0015	96
12/18/20	6.46	0215	6.41	6.38	2245	96
12/19/20	6.41	2400	6.37	6.35	1845	96
12/20/20	6.72	2400	6.53	6.33	0745	96
12/21/20	6.72	0130	6.64	6.60	0930	96
12/22/20	6.83	2400	6.77	6.73	0745	96
12/23/20	6.91	1015	6.85	6.81	1600	96
12/24/20	6.87	2245	6.86	6.84	0030	96
12/25/20	6.93	1530	6.88	6.83	2315	96
12/26/20	6.89	0915	6.85	6.78	2345	96
12/27/20	6.82	2015	6.79	6.72	1330	96
12/28/20	6.80	0015	6.55	6.43	2400	96
12/29/20	6.52	2345	6.47	6.41	0230	96
12/30/20	6.69	0500	6.64	6.51	0415	96
12/31/20	6.72	2400	6.68	6.63	1400	96
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AVERAGE	6.65		6.58	6.51		
STD DEV.:	0.14		0.15	0.17		